

HLL BIOTECH LIMITED

INTEGRATED VACCINES COMPLEX, CHENGALPATTU

nne pharmaplan®

Document Name:

Data Sheet for Boiler

Data Sheet No:

NPI/120310/UTL(URS)/U1/D02.01

Date / Revision:

2014-05-14 / 03



OPERATION DATA

1	Make	XX	17	Site Data	
2	Model No	XX		Max. temp	39.4 deg. C
3	Location	Indoor <input checked="" type="checkbox"/>		Min. temp	18.3 deg. C
		Outdoor <input type="checkbox"/>		Max R H	88%
4	Capacity (Actual output)	4000 Kg/hr		Min. R H	41%
5	F & A	100 °C		Altitude (above MSL)	30 feet
6	Quantity	2 Nos	18		
7	Boiler Type	IBR <input checked="" type="checkbox"/>	19	Operation	Continuous <input checked="" type="checkbox"/>
8	Discharge Pressure	10.54 Kg/cm ² (g)			Dis-continuous <input type="checkbox"/>
9	Discharge Temperature	XX	20		
10	Type	Firetube <input checked="" type="checkbox"/>	21	Capacity (Rated output)	XX
11	Type of Fuel	<input checked="" type="checkbox"/> High Speed Diesel (HSD)	22	Burner Type	Monoblock Pressure Jet type
12			23	Burner Ratio control	Required
13	Efficiency on NCV	XX (Min. 89%)	24	Trim Control	Required with online O ₂ analyzer
14	Dryness Fraction	>98%	25		
15	Fuel Consumption, LPH	XX	26		
16	Safety Valve Setting	10.54 kg/cm ² (g)	27		

MANUFACTURER DATA

28	Boiler M.O.C.	CS as per IS-2002/ SA516 GR.70			
29	Over All Dimension LxWxH	XX	43	Water Requirement	
30	Dry Weight (approx in KGs)	XX	44	Soft water Requirement(Ltr/Hr)	XX
31	Flue Gas Out Let size (mm)	XX		pH	XX
32	Steam Outlet size (mm)	XX		Hardness / TDS	XX
33	Max. CO ₂ % in Flue Gas	XX	45	Common Feed Water Tank Capacity	16000 Ltr.(for 2 boilers)
34	Max. O ₂ % in Flue Gas	XX	46	Fuel Oil Day Tank Capacity	990 Ltr For each boiler.
35	Flue Gas Analysis	Yes <input checked="" type="checkbox"/>	47	Power Supply	415V+/-10%, 3Phase, 50Hz +/-5%
		No <input type="checkbox"/>	48	Total Connected Load (KW)	XX
36	Pressure Reducing System	Yes <input type="checkbox"/>	49	Blower details	
		No <input checked="" type="checkbox"/>		Blower Type	Centrifugal with VFD
37	Indicator & Alarms	Audio-Visual		Blower Motor (KW)	XX
38	Level control	XX		Blower Arrangement	XX
39	Eff.of boiler on HSD firing	XX		Blower M.O.C.	XX
40	Boiler Chimney as per IS 6533	Yes <input checked="" type="checkbox"/>		Blower Motor RPM	XX
		No <input type="checkbox"/>		Blower Head	XX
41	Turn down ratio	1:4(**)	50	Feed water Pump	
				No.of pumps	2 Nos (1W+1S) For each Boiler
42	Fuel Oil Pump			Feed water pump type	Multi stage centrifugal
	No.of pumps	2 Nos (1W+1S) For each Boiler Phase wise		Capacity of Pump, CMH	XX
	Fuel Pump Type	XX		Pump Motor (KW)	XX
	Capacity of Pump, CMH	XX		Pump Head, MWC	XX
	Fuel Pump Motor (KW)	XX			
	Fuel Pump casing M.O.C.	CI			

XX - VENDOR TO SPECIFY IN THEIR OFFER

** - VENDOR TO CONFIRM

AFE -- Approved for Enquiry, AFO -- Approved for ordering

03	2014-05-14	VSHI	SMBY	HBL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	sheet:
Rev	Date	Prepared by	Checked by	Approved by	AFE	AFO	1 / 2

HLL BIOTECH LIMITED							
INTEGRATED VACCINES COMPLEX, CHENGALPATTU							
nne pharmaplan®		Document Name:		Data Sheet for Boiler		 <small>HLL BIOTECH LIMITED</small> <small>(Subsidiary of HCL Lifesciences Limited)</small> <small>(A Government of India Enterprise)</small>	
		Data Sheet No:		NPI/120310/UTL(URS)/U1/D02.01			
		Date / Revision:		2014-05-14 / 03			
51	Remarks : 1) The boiler shall be supplied as a skid mounted unit with foundation Bolts. 2) Vendor to provide all necessary isolation valves (Piston/Bellow seal type) along with package. 3) Electrical control panel with burner management scheme shall be supplied. 4) Boiler operation shall be done in Auto as well as Manual mode. 5) All necessary drawings with operation & Maintenance Manual shall be supplied in 3 sets. 6) All Necessary safety arrangement with fault indicators on panel shall be provided. 7) Suitable protective arrangement shall be provided for movable parts etc. 8) Hot surfaces shall be insulated suitably with resin bonded mineral wool and GI cladding. 9) Vendor should provide communication port suitable for connecting to the central BMS system.						
ACCESSORIES / SAFETIES / INTERLOCKS							
52	Tank M.O.C.(Water & HSD tank)	CS as per IS : 2062	62	Steam Temp. Low	Warning		
53	Pressure Gauge	Required	63	Oil Pressure low	Warning / cut off		
54	Safety valves - 2 Nos	Required	64	Feed water flow level low	Warning / cut off		
55	Steam Drain Trap	Required	65	Control Panel	Required		
56	Press. Switch	Required	66	(System ON / OFF)	Required		
57	Flue gas Temp. High	Warning / cut off	67	Flame Failure	Warning / cut off		
58	Automatic blowdown system	Required	68	Steam Pressure High	Safety valve open		
59	Efficiency monitoring system	Required	69	Steam & oil flow meter	Required		
60	Electronic compound regulation	Required	70	Low boiler water level	Warning / cut off		
61	Level control system	Required					
	CONNECTION		SIZE				
71	Main steam stop valve	XX					
72	Feed water pump inlet	XX					
73	Blow down valve	XX					
74	Fuel oil inlet	XX					
75	Flue gas outlet (I.D)	XX					
NOTES							
1	Supply, fabrication, erection, insulation with required thickness of mineral wool & 24 G GI cladding, testing & commissioning of pipe, pipe fitting, valves, strainers etc for 12000 ltr feed water tank for boiler shall be in scope of vendor.						
2	Supply fabrication, erection, insulation with required thickness mineral wool 24 G GI cladding, testing & commissioning of pipe, pipe fitting, valves, strainers etc for 990 ltr HSD tank for each boiler shall be in scope of vendor.						
3	Exhaust duct with two bellow in both outlet of boiler & Inlet of Chimney from boiler & then to chimney should be in scope of vendor & the same duct should be insulated.						
4	Vendor to provide complete detail BOQ, datasheet & specification for feed water tank, fuel tank, chimney design and construction details & exhaust duct.						
5	Boiler chimney should be designed as per IS 6533 . The chimney should be constructed in Carbon steel material or high temperature aluminising from inside of chimney.						
6	Vendor should mention makes & specifications of all brought out components.						
7	Vendor to consider the IBR approval of Boiler and other package components like piston valves etc. in their scope.						
8	Vendor should consider all necessary accessories						
	<u>PRE-DESPATCH / DOCUMENTS REQUIRED</u>						
	1) Complete operational test of the unit with FAT protocol						
	2) Instrum., Operational and Maint. Manual in 3 set						
	3) GA drawings						
	3) P & ID drawing						
	5) Civil drawings						
	6) As built drawings						
	7) All test certificates (Material, Hydraulic etc,...)						
	8) Warranty certificates						
	NOTE: PLEASE FIND ENCLOSED BOILER ROOM LAYOUT						
	XX - VENDOR TO SPECIFY		** - VENDOR TO CONFIRM				
	AFE -- Approved for Enquiry, AFO -- Approved for ordering						
03	2014-05-14	VSHI	SMBY	HBL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	sheet:
Rev	Date	Prepared By	Checked by	Approved by	AFE	AFO	2/2